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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/941,505 | 08/28/2001 | Patrick H. Kilawee | E14.2-9861 | 6840 |
| 490 | 7590 | 01/25/2006 | EXAMINER | |
| VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185 | | | MCKANE, ELIZABETH L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1744 | |

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/941,505

Applicant(s)

KILAWEE ET AL.

Examiner

Leigh McKane

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5, 7-11, 13-15, 21 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5, 8-11, 13-15, 21 and 26 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. Claims 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2 of the claim, “said time interval” lacks positive antecedent basis because no time interval was recited in claim 21, from which this claim depends. Claim 8 has been treated as if it depends from claim 7, which recites a “time interval.”

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 4, 9-11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drean (FR 2757935) in view of Mason et al. (U.S. 4,547,381).

With respect to claims 21, 3, 4, 9, and 11, Drean teaches a unit 1 comprising an enclosed space not easily accessible for cleaning and deodorizing, the unit having an interior and an exterior, the unit comprising a perforated container 32, holding a deodorizing composition 323,324,325, an access port 2 in the unit 1 openable from the exterior of the unit 1 to permit placement and replacement of the container 32, and a holder 3 for the container 32, accessible through the access port 2 and located in the front of the unit 1, which retains the container 32 within the interior of the unit 1 at a location exposed to the ambient air within the interior. The

Art Unit: 1744

invention of Drean further includes an indicator 322 on the front of the container 32 for indicating when the deodorizing composition needs replacement. Placement of a new container 32 will activate the new indicator thereon. See English abstract. See French patent, page 1, lines 28-30; page 3, lines 1-13; Figures 1, 2, 5, and 6. Drean does not disclose that the deodorizing composition will generate an antimicrobially active gas.

Mason et al. teaches a dry, solid composition which generates chlorine dioxide gas upon exposure to water or water vapor. The composition is especially suitable for the deodorization and disinfection of enclosed spaces such as refrigerators or lockers. See Abstract; col.3, lines 6-19 and lines 43-48. The composition is composed of a metal chlorite and an acidic component. See col.4, lines 4-50. It would have been obvious to use the composition of Mason et al. in the apparatus of Drean because Mason et al. specifically teaches the need to deodorize closed spaces such as refrigerators. It would have been obvious to put the composition with the container 32 and holder 3 of Drean because they are already designated recipients of a deodorizing composition.

With respect to claim 10, it is deemed obvious to optimize the amount of gas generating composition used based upon the size of the enclosure and the expected level of contamination within the enclosure. A result effective variable, such as use amount, is readily determinable through routine experimentation by one of ordinary skill in the art.

4. Claims 5, 14, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drean and Mason et al., as applied to claim 21 above, and further in view of Hamilton et al. (U.S. 6,607,696).

As set forth in the paragraphs *supra*, the container is 32 and the holder is 3. However,

Art Unit: 1744

when one interprets the holder to be tray 3, the invention of Drean lacks a separate permeable container. Hamilton et al. teaches a composition for the controlled generation and delivery of chlorine dioxide gas upon contact with water. See Abstract. The composition is held within a microporous hydrophobic polypropylene envelope, which permits water vapor transmission through the envelope to the composition to initiate the gas-generating reaction. See col.7, lines 11-42; col.8, lines 25-28. As the envelope of Hamilton et al safely contains the chemical reactants while still allowing water vapor transmission into the envelope and gas transmission out of the envelope, it would have been an obvious means to safely enclose the chemical reactants of Mason et al. within the tray 3 of Drean, for ease of handling.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drean and Mason et al., as applied to claim 21 above, and further in view of Locke (US 4,123,130).

The access port of Drean is not configured such that the contents within the interior of the unit, other than the container, may not be accessed therethrough. Locke teaches a unit 10 including an enclosed space not easily accessible, having an interior and an exterior. The unit 10 of Locke further includes an access port (drawer) 26 openable from the exterior and which allows access to a holder 64 located in the interior of the enclosed space. See Figures 1 and 2.

It would have been obvious to one of ordinary skill in the art to use the holder and tray of Drean within the drawer of Locke in order to deodorize the interior thereof.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drean, Mason et al., and Hamilton et al. as applied to claim 26 above, and further in view of Twardowski et al. (U.S. 4,683,039).

The combination *supra* is silent with respect to the container being fabricated from

Art Unit: 1744

nonwoven polyethylene or nonwoven polytetrafluoroethylene. Twardowski et al discloses known hydrophobic microporous materials such as nonwoven polytetrafluoroethylene and nonwoven polyethylene (col.2, lines 11-26). Twardowski et al teaches that these materials permit the passage of gas but prevent the passage of aqueous solutions.

Since Hamilton et al. discloses that other hydrophobic films can be used in place of the polypropylene (col.7, lines 40-42), it is deemed obvious to one of ordinary skill in the art to substitute one know hydrophobic microporous film for another where the results are not unexpected.

Allowable Subject Matter

7. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is an examiner's statement of reasons for allowance: The prior art of record, although teaching a unit having an access port, a container, and an indicator, fails to teach or suggest an indicator device which provides a signal in response to a predetermined time interval between openings of the access port.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 1744

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

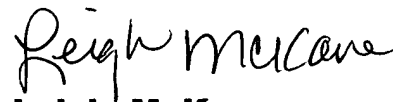
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Thursday (5:30 am-2:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1744

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leigh McKane
Primary Examiner
Art Unit 1744

elm
22 January 2006